

PATENT CLAIMS:

1. A fibre insulation material for the manufacture of a non-woven fibreboard comprising primary fibre components of
 - 5 a portion of 50 % to 90 % cellulose fibres;
 - 2 % to 20 % synthetic fibres, said synthetic fibres preferably being crimped fibres and having a length between 12 to 75 mm; and
 - 2 % to 20 % bi-component fibres comprising a core and an outer sheathing, said outer sheathing having a lower melting point than the core.
- 10 2. A fibre insulation material according to claim 1, wherein said synthetic fibres are provided with fire-retarding chemical, such as Borax, Boric acid, Ammonium sulphate or aluminium sulphate mixed with said synthetic fibres.
- 15 3. A fibre insulation material according to claim 2, wherein said cellulose fibres are saturated with fire-retarding chemical.
4. A fibre insulation material according to claim 1 to 3, wherein the content of the fire-retarding chemical is between 1 and 30 of the total fibre material composition.
- 20 5. A fibre insulation material according to any of the claims 1 to 4, wherein said cellulose fibres having a length between 1 to 10 mm.
6. A fibre insulation material according to any of the claims 1 to 5, wherein said bi-
25 component fibres having a length between 1 to 10 mm, preferably with an average length of approx. 3 mm.
7. A fibre insulation material according to any of the claims 1 to 6, wherein said fibre board material is manufactured with a grammar weight of 10 to 50 kg/m³.

8. A fibre insulation material according to any of the claims 1 to 7, wherein said synthetic fibres are hollow.
9. A fibre insulation material according to any of the claims 1 to 8, wherein said 5 crimped synthetic fibres are essentially helically shaped.
10. A method of manufacturing a fibre board made of a material according to any of the preceding claims, whereby the material is laid onto a forming wire in a air-laid dry forming process and cured in a heat treatment process in which the formed fibre 10 board is subjected to an air circulation with air heated to a temperature of 90°C to 145°C, preferably approx. 130°C.